

NOVEMBER/DECEMBER 2025

23UECA53A — MOBILE COMPUTING

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Give some examples for Wireless Devices.
2. State the benefits of Spread Spectrum System.
3. Write down the fundamental features of the GSM System.
4. List the different types of Satellite Orbits.
5. Write the main advantages of Spread Spectrum Technology.
6. What is meant by Decapsulation?
7. Define Foreign Network.
8. What do you mean by Tunnelling?
9. Define the term Wireless Telephony Application.
10. What is the role of WTA user agent?



SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Describe the applications of Wireless Networks and Mobile Communications.

Or

- (b) Briefly discuss on "Direct Sequence Spread Spectrum.

12. (a) Illustrate the comparison of SDMA, TDMA, FDMA and CDMA mechanisms.

Or

- (b) Write short notes on Satellite Networks.

13. (a) Narrate three different Physical layer supported by IEEE 802.11.

Or

- (b) Briefly describe the Bluetooth technology with their User Scenarios.

14. (a) Explain how can Dynamic Host Configuration Protocol be used for Mobility and support for MobileIP.

Or

- (b) Write an account on Mobile IP and also list their goals and assumption.

15. (a) Summarize about the basic features of Wireless Mark-up Language.

Or

- (b) Exemplify the several capabilities of WML Script.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Examine the different Multiplexing techniques used in Wireless Communication.

17. Expound the System Architecture and Protocols of GSM.

18. Illustrate the Protocol architecture and MAC Management of IEEE. 802.11.

19. Elucidate the various Routing Strategies in Mobile Ad-hoc Networks.

20. Analyze the architecture of Wireless Telephony Application(WTA).